## UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: FY 2018 Air Force

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

3080F: Other Procurement, Air Force / BA 04: Other Base Maintenance and

Support Equip / BSA 2: Personal Safety & Rescue Equip

P-1 Line Item Number / Title: 842140 / Night Vision Goggles

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	5.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	5.950
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	5.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	5.950
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	5.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-	5.950
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)												
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	

# **Description:**

FY16 funding includes \$3.580M appropriated for Overseas Contingency Operations (Guardian Angel Fusion Goggle-Enhanced).

Modern warfare resulted in an increase in airborne combat under the cover of darkness. Night missions include ground operations, preparation of the aircraft for take-off and landings in complete darkness, lights-off air refueling, and visual identification of enemy targets hidden under the night sky. Consequently, ground personnel and aircrew require the capability to see in very low visibility conditions at night and high ambient light conditions such as full moon or heavily lighted residential areas. The use of Night Vision Goggles (NVG) is critical for combat rescue, special operations, and homeland security missions.

A lack of night vision capability would significantly decrease combat effectiveness in night operations, risk flight safety, and increase the probability of fratricide. Aircraft such as HH-60 helicopters, HC-130s, F-16s, and special mission C-130s primarily operate in low altitude environments during covert night operations. Hence, NVGs are vital to the success of these missions, providing a dramatic increase in safety, situational awareness, and survivability during the execution of near daytime tactics, including visual formation criteria. Furthermore, the proliferation of NVG-equipped adversaries underscores the urgent need to supply ground and air forces with night vision equipment.

Funding for this exhibit contained in Program Elements (PEs) 0702833F, 0207227F, and 0207588F.

Ground crew Goggles:

AN/PVS-14 Ground crew Goggle: This monocular night vision device is a hand-held, head-mounted, helmet-mounted, or weapon-mounted night vision system, which enables walking, weapon firing, short-range surveillance, map reading, vehicle maintenance, and first-aid administration during moonlight and starlight conditions. The AN/PVS-14 supports a vast spectrum of ground and air operations to include aircraft maintenance, civil engineering, emergency response, security, and other missions.

AN/PVS-15 Ground crew Goggle: This binocular NVG is a helmet-mounted or hand-held night vision system, which is primarily used by Special Forces during night drop operations. The AN/PVS-15 can be used for all nighttime ground operations. An added benefit of this particular binocular goggle is the back-up capability in the event one of the two tubes fails.

Guardian Angel Fusion Goggle - Enhanced (FGE): The FGE is a helmet mounted dual waveband goggle which will increase identification and discrimination of combatants in most battlefield conditions and light levels through the use of image intensification fused with thermal imagery. Continued procurement of systems are required for combat rescue until the next generation of multi-spectral NVGs are developed

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Line Item MDAP/MAIS Code: N/A

and available for ground crew operators. Due to rapidly changing threat environment, the acquisition program manager has the authority to redirect funding as necessary to meet current slated and emerging requirements.

### Aircrew Goggles:

AN/AVS-9 (F4949G-TG) Aircrew Goggle: This night vision goggle provides aircraft and ground personnel with the capability to see the horizon, terrain features and enemy ground fire, thereby reducing the potential for air-to-ground fratricide and mid-air collisions during night operations. The AN/AVS-9 (F4949-TG) is a light-weight, helmet-mounted goggle equipped with pinnacle tube technology that mitigates effects of sudden bright light exposure.

### Test Sets:

ANV-20/20 Test Set, Infinity Focus: The ANV-20/20 is a portable instrument, which allows quick and accurate evaluation and adjustment of all goggle parameters. All NVGs require operational checkout.

ANV-126A Test Set, Infrared Viewer: The ANV-126A is a commercial upgrade to the ANV-126, which is suitable for field operational checks and depot level NVG maintenance. This test set provides accurate checks for NVG resolution, gain, power drain, binocular goggle collimation, image quality, and image distortion. The ANV-126A uses state of the art technology and provides enhanced capabilities to the user.

ANV-126A-UGF Test Set, Time Compliance Technical Order (TCTO) Kit: The ANV-126A-UGF is a commercial TCTO kit that converts the ANV-126 to the ANV-126A Test Set.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), capabilities under this line item are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and military support to civil authorities. Projected allocations for reserve component requirements are subject to total force demand priorities.

Note: All funding and tasks from FY17-FY21 have been moved to Project 842990, Items Less than \$5 Million.

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
AF	Quantity	195	0	0	0	0	0	0	0	0
	Total Obligation Authority	4.995	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AFNG	Quantity	184	0	0	0	0	0	0	0	0
	Total Obligation Authority	0.716	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AFR	Quantity	63	0	0	0	0	0	0	0	0
	Total Obligation Authority	0.239	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total: Secondary Distribution	Quantity	442	0	0	0	0	0	0	0	0
	Total Obligation Authority	5.950	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

#### Justification:

All funding and tasks from FY17-FY21 have been moved to Project 842990. Items Less than \$5 Million